

December-12-11 8:30:26 AM

**\*77513\***

Page 1

**Accept**

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**Item Name:** Rib Assembly

**Start Date:** 12/12/2011      **Start Qty:** 2.00

\*2\*

**Cust Item ID:**

**Required Date:** 16/12/2011      **Req'd Qty:** 2.00

\*~\*

**Customer:**

**Reference:**

**Approvals:**

Process Plan: M.C.J

Date: 11/12/17

### Tooling:

Date:

Run Start \*NR1\*

**QC:**

Date:

**SPC (Y/N):**

Date:

Stop \*NR2\*

<b>Draw Nbr</b>	<b>Revision Nbr</b>
D3852	Rev A

100

0.00

**\*100\***

## Large Fab

0.00

Large Fab

## Large Fab

## Memo

1- pick D3166-3 to cut D3852-2 rib (RH) as per dwg D3852 using DT9440 jig

2- drill hole (3/16") in D3852-2 using DT9439 jig and open to finish size as per dwg D3852

3- c'sink hole as per dwg

4- remove identification markings

5- deburr

6- weld D3759-1 bushing as per dwg D3852

A/R ER316 S.S. Rod Batch: M115778

7- grind bushing weld flush as per dwg dwg D3852

8- deburr hole if necessary

Ac 12.01.19 (x4) 0

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 77513

December-12-11 8:30:26 AM

**\*77513\***

Page 2

Item ID: D3852-042

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Rib Assembly

Stop

**\*NS2\***

Start Date: 12/12/2011 Start Qty: 2.00

**\*2\***

Cust Item ID:

Required Date: 16/12/2011 Req'd Qty: 2.00

**\*2\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 <b>*130*</b> QC Quality Control	QC10- Inspect visual per QSI004- ground welds  Memo	0.00 0.00		8 12/01/24					
140 <b>*140*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00		8 12/01/24					(44) 042
150 <b>*150*</b> Packaging Packaging	Identify as per dwg & Stock Location:  Basket cell Memo	0.00 0.00							12.01.23 Yx

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 77513**

December-12-11 8:30:26 AM

**\*77513\***

Page 3

Item ID: D3852-042 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Rib Assembly  
Start Date: 12/12/2011 Start Qty: 2.00 **\*2\*** Cust Item ID:  
Required Date: 16/12/2011 Req'd Qty: 2.00 **\*2\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC21- Final Inspection - Work Order Release	0.00							
<b>*160*</b>									
QC	Memo	0.00							
Quality Control									

12/11/24 *[Signature]*

12-01-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

December-12-11 8:30:31 AM

Page 1

Work Order ID: 77513

**\*77513\***

Parent Item: D3852-042

**\*D3852-042\***

Parent Item Name: Rib Assembly

Start Date: 12/12/2011

Required Date: 16/12/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 08-12-02 new issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3166-3 <b>*D3166-3*</b> Basket Hoop		Manufactured	No			100	Each	3.0000	0.18	0.378947			
										**	<u>Ac 12.01.19</u>		

Location	Loc Qty	Loc Code
----------	---------	----------

WA007	3	
<u>73627</u>	3	

D3759-1 <b>*D3759-1*</b> Bushing		Manufactured	No			100	Each	297.0000	1	2			
										**	<u>0.757894</u> <u>12.01.23</u>		

Location	Loc Qty	Loc Code
----------	---------	----------

WA005	297	
66489	2	
72316	14	
<u>74443</u>	80	
<u>74783</u>	201	

1x  
3x

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



ITEM	QTY -041	QTY -042	P/N	DESCRIPTION
1	X		D3852-041	RIB ASSEMBLY
2		X	D3852-042	RIB ASSEMBLY
3	1	1	D3759-1	BUSHING
4	1		D3852-1	RIB
5		1	D3852-2	RIB

**D3852-041 RIB ASSEMBLY**

**D3852-042 RIB ASSEMBLY**

XERO COPY  
 RETURN TO  
 ENGINEERING  
 UNCONTROLLED COPY  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NO. **77513 M.C.J**

11/12/12

RELEASE  
08/11/18 MP

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.83 lbs EACH
- 8) WELDING: PER QSI 004

A	NEW ISSUE	MB	08.11.07
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.11.07		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D3852** REV. A  
 SHEET 1 OF 3  
 TITLE **RIB ASSEMBLY** SCALE NTS

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

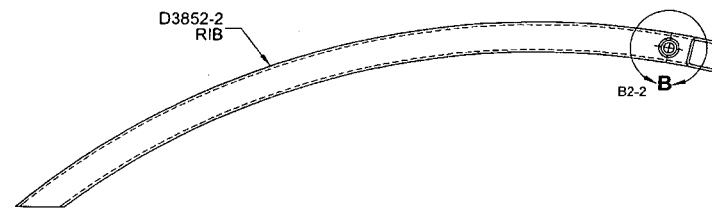
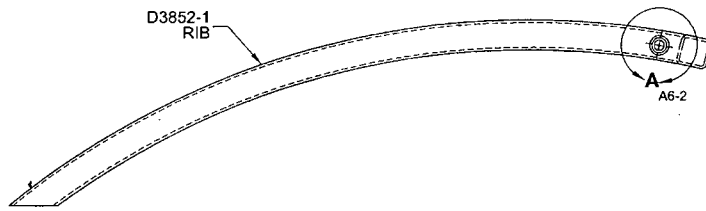
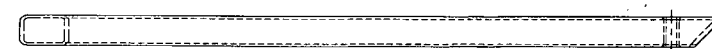
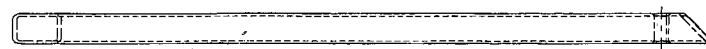
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

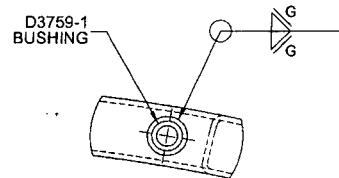
**NOTE:** Date & initial all entries

77513

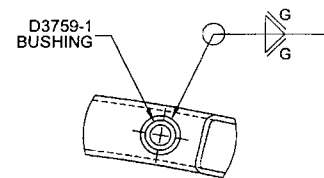


**D3852-041 RIB ASSEMBLY**

**D3852-042 RIB ASSEMBLY**



**DETAIL A**  
SCALE 2X C5-2



**DETAIL B**  
SCALE 2X C2-2

**RELEASED**

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	125	DRAWING NO.	REV. A
MFG. APPR.		D3852	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		RIB ASSEMBLY	NTS
DATE	08.11.07	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

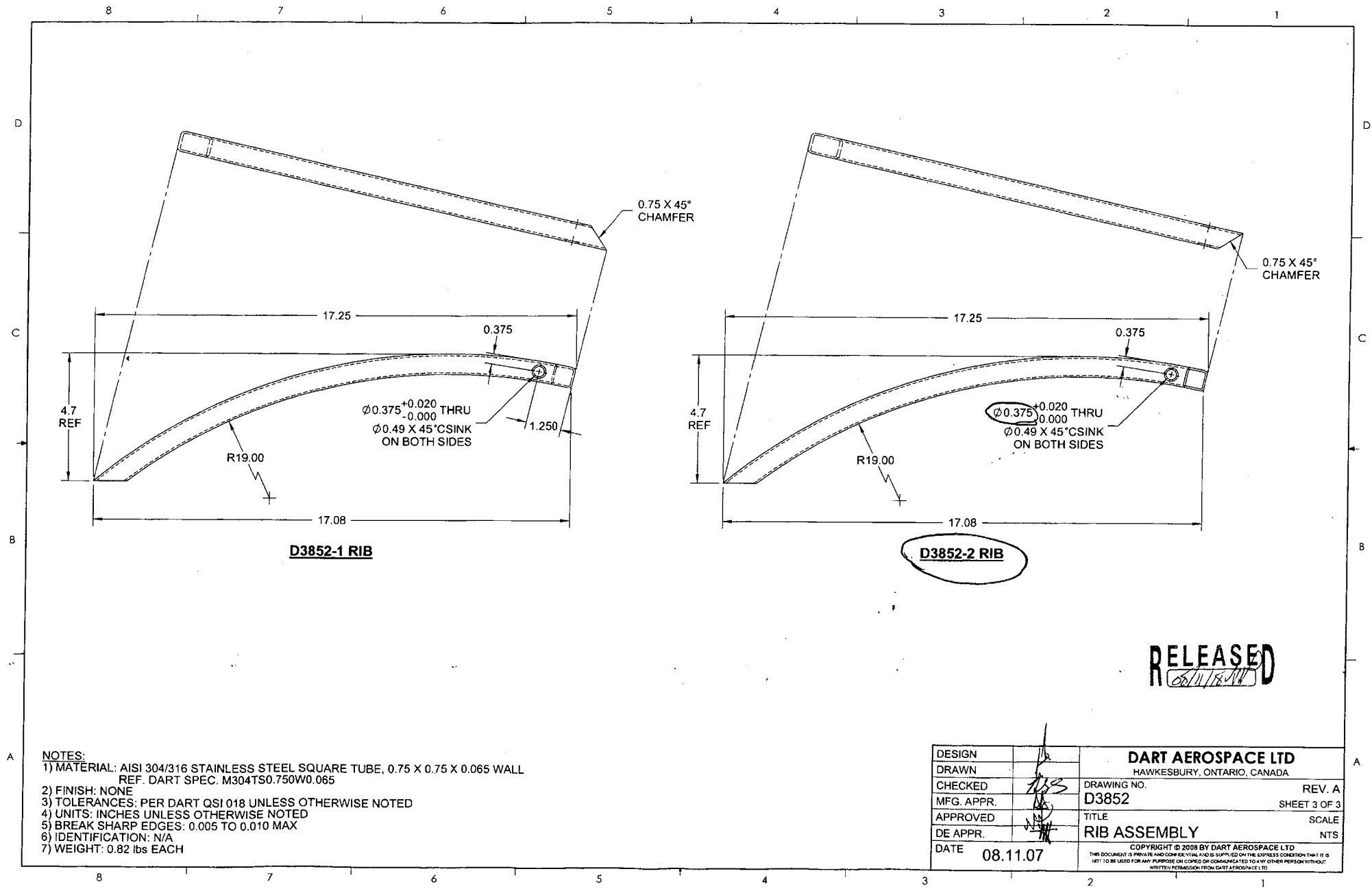
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

77513



**D3852-1 RIB**

**D3852-2 RIB**

**RELEASED**  
08/11/07

- NOTES:**  
 1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.75 X 0.75 X 0.065 WALL  
 REF. DART SPEC. M304TS0.750W0.065  
 2) FINISH: NONE  
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
 4) UNITS: INCHES UNLESS OTHERWISE NOTED  
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX  
 6) IDENTIFICATION: N/A  
 7) WEIGHT: 0.82 lbs EACH

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		<b>D3852</b>	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		<b>RIB ASSEMBLY</b>	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries